South Carolina 4-H Volunteers' Newsletter
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we CU volunteer

Editor/Author: T. Ashley Burns

South Carolina 4-H'ers going to D.C.

Please be thinking of our delegates as we send eight 4-H youth and two chaperones to Washington D.C. for the 2017 Presidential Inauguration!!! Youth selected as delegates for this trip underwent a vigorous screening process and were announced at State 4-H Congress this summer. Our representatives are:

- Jeffery Feaster, Fairfield County
- T.J. Price, Saluda County
- Grey Riley, Saluda County
- MacKenzie Riley, Saluda County
- Lindsey Scott, Saluda County
- Geneffer Sweatman, Bamberg County
- Garrett Ulmer, Colleton County
- Ashlyn Whittemore, Charleston, County

Chaperones:

Cynthia Price, Saluda County 4-H Volunteer

Allie Winter, Lexington County 4-H Agent

South Carolina 4-H Pollinator Program

A CLEMSON® EXTENSION PROGRAM

Honey Bee Project

Deadline: February 3, 2017

Register: http://www.clemson.edu/4h/project_areas/natural_resources/honey_bee

Cost: $40 ($50 for non-4-H members)

When: The project runs from April to August

A surprise for the first 100 youth that register!

Regional and State awards will be given to the winners of the Junior and Senior age divisions

Contact your local 4-H Agent for more information

CLEMSON COOPERATIVE EXTENSION

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CLEMSON COOPERATIVE EXTENSION

Monthly 4-H Club Activity Idea

adapted from Little Bins for Little Hands

Candy STEM

Objective: to explore candy in a new, science-related way, allowing youth to gain confidence and interest in STEM activities.

Age Range: All ages.

Hands-on Activity: float the "m" from M&M candy.

Life Skills used: HEAD = learning to learn;
HEART = cooperation;
HANDS = team work;

Introduction

Here are some fun ways to get rid of leftover candy from the holidays without compromising New Year's resolutions! Let's investigate STEM with m&m's, skittles, and more! Depending on the age range you are working with, you can incorporate more or less science-related terms.

Our goal for involving youth in hands-on STEM activities is to spark an interest and curiosity about how things work in the everyday world around us. Also, we want to give them the confidence and skill-set to put that knowledge into action to solve real-world problems. We encourage you to use the educational resource Little Bins for Little Hands (found online at littlebinsforlittlehands.com) for simple, step-by-step STEM activities using candy! Youth should discover something new about this common-place item using scientific inquiry.

More candy-related STEM activities can be found at:

- Skittles Science
- Candy Taste Test: 5 Senses Science
- 5 Candy Math Activities

Science-related terms to describe phenomenon observed in the m&m experiement:

The colored candy coating is hydrophilic because it dissolves in water.

- Hydrophilic substances are things that like water. ***Hydro-*** means "water"; ***-philic*** means "loving".
- When something ***dissolves*** in water, it breaks apart and can no longer be easily separated back out.
- Like sugar dissolves into water, but sand does not.

The chocolate portion of the candy is hydrophobic because it does not dissolve readily in water.

- Hydrophobic substances are things that do not like water. ***-phobic*** means "fear of"
- Fat-containing substances (like chocolate) do not dissolve easily in water.
- Like oil in salad dressings separates from vinegar.

Floating M's Activity

Materials:

- m&m candies
- small clear cups
- water

Put water in the cups and drop one m&m candy in each cup with the "m" facing up. Have youth make predictions about what will happen.

Will the candy sink or float? Why?

What will happen to the candy as it sits in the water?

After about 10-20 minutes, the colored candy coating should be completely dissolved and the "m" should rise to the surface.

Why does the "m" float? (because it's lighter than the water; it's buoyant.)

What do you think the "m" is made of? (It's actually made out of edible paper! A lot of cakes are decorated using edible paper designs too.)

After you finish with the experiment, don't forget to have a time of reflection and discussion.

Why didn't the chocolate part of the candy dissolve?

Is the candy still safe to eat afterwards? Do you think the "m" would taste good?

How do you think the candy was assembled? For instance, what order were the layers? Was the "m" on top or underneath the colored-candy coating?

How would water temperature affect this experiment? (Think about how the temperature of tea effects how quickly sugar will dissolve.)

Conclusion

Science is put into action everyday in the things all around us. We can use it to investigate and explain all sorts of items including candy!!!

Source: Little Bins for Little Hands